



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,061	08/12/2002	Eduardo Casais	875.0105.U1 (US)	8518
29683	7590	02/09/2006	EXAMINER	
HARRINGTON & SMITH, LLP 4 RESEARCH DRIVE SHELTON, CT 06484-6212			KARIKARI, KWASI	
			ART UNIT	PAPER NUMBER
			2686	

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/088,061

Applicant(s)

CASAIS, EDUARDO

Examiner

Kwasi Karikari

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08/12/2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16, 18 and 20-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16, 18 and 20-24 is/are rejected.
- 7) ☒ Claim(s) 17 and 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03/12/2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>03/12/2002</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Information Disclosure Statement*

1. The information disclosure statement (IDS) submitted on 03/12/2002 is in compliance with the provision of 37 CFR 1.97, has been considered by the Examiner, and made of record in the application file.

### *Claim Objections*

2. a) Claims 2,15 and 22 are objected to because of the following informalities: Regarding claims 2 and 15, Applicant uses "supplying terminals" and "the internet" respectively. Examiner suggests using "supplying terminal" and "an internet" respectively.

b) Regarding claim 22, it appears a comma should be placed between "portable video player" and "personal digital assistants".

c) Examiner also suggest using "The system (10)" instead of "A system (10)" in claims 2-23. For examination purposes, the Examiner would replace "A system (10) with "The system".

d) Claims and 17 and 19 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claims cannot serve as the basis for another multiple dependent claims. See MPEP § 608.01(n). Accordingly, claims 17 and 19 are not being further treated on the merits.

Appropriate corrections are required.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

**Claim 24 is rejected under U.S.C. 102(e) as being unpatentable over Spitznagel et al., (WO 9913661), (hereinafter Spitznagel).**

Regarding **claim 24**, Spitznagel discloses a mobile terminal (wireless message device 106) which is able to interrogate, over a local network (connection between wireless communication 104 and wireless messaging device 106, see Fig. 1), a supplying terminal (104) in order to determine the nature of electronic data stored in the supplying terminal (see Page 3, lines 32-39), the mobile terminal (106) having a display (different

Art Unit: 2686

lists are displayed, see Page 3, lines 32-39), on which can be presented information relating to the electronic data, requesting means (selected programs are requested, see Page 3, lines 32-39) to request the supplying terminal (104) to transmit at least some of the electronic data (selected program), receiving means (device 106 receives the list of message, see Page 3, lines 32-39) which can receive the transmitted electronic data, and storage means (listed message is compared to those that are already existing in device 106, see Page 3, lines 32-39) which can store transmitted electronic data.

### **Claim Rejections - 35 USC § 103**

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1,2,3,6,8,11,14,16,20,21 and 22 are rejected under U.S.C. 103(a) as being unpatentable over Spitznagel et al., (WO 9913661), (hereinafter Spitznagel) in view of Howell et al., (U.S. 6,462,644), (hereinafter Howell).**

Regarding **claim 1**, Spitznagel discloses a system (a wireless two-way messaging system 100, see abstract) for supplying data in electronic form comprising:

a mobile terminal (wireless messaging device 106, see Fig. 1) a supplying terminal (wireless communication system 104), a wireless network (connection between 104 and 106, see Fig. 1) and a connection (connectivity between information server 102 and the wireless communication system 104, see Page 3, lines 14-19), the supplying terminal (104) being able to obtain electronic data (a list of application programs, see Page 3, lines 20-39) from at least one data server (102) by communication over the wireless network, the supplying terminal being able to supply at least part of the electronic data to the mobile terminal (106) by communication over the wireless connection (connection between 104 and 106, see Fig. 1).

Spitznagel fail to disclose whether the communication between information server 102 and wireless communication system 104 is wireless.

Howell teaches an efficient way to communicate vending –related data from a vending machine 202 to a communication concentrator 210 and data warehouse 214, via wireless data network 208 or various other radio-based communication technologies 208 (see col. 2, lines 40-45, col. 4, lines 11-25 and Fig. 2).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Howell into the system of Spitznagel for the benefit of achieving a system that employs an efficient way of communicating vending-related data between a vending machine and a data warehouse that minimizes the expense of establishing a remote connection.

Art Unit: 2686

Regarding **claim 2**, as recited in claim 1, Spitznagel fails to disclose that the system has a plurality of data servers.

Howell teaching's of the communication concentrator 210 in connection with terminals 214, 216, 218 and 220 for data processing (see col. 5, lines 6-39), which meets the limitations of a plurality of data servers.

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Howell into the system of Spitznagel for the benefit of achieving a system that employs an efficient way of communicating vending-related data between a vending machine and a data warehouse that minimizes the expense of establishing a remote connection.

Regarding **claim 3**, as recited in claims 1 or 2, Spitznagel further discloses that the system in which the supplying terminal (104) acts as a proxy between the mobile terminal (106) and the data server (102), see Fig. 1.

Regarding **claim 6**, as recited in claim 1, Spitznagel fails to disclose that the supplying (104) terminal is a vending machine which supplies electronic data in exchange for a monetary payment.

Howell teaches that a communication subscriber is charged a fee each time based on the duration of data transmission from the vendor machine 202 (see col. 6, lines 7-24 and Fig. 2).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Howell into the system of Spitznagel for the benefit of achieving a system that employs an efficient way of communicating vending-related data between a vending machine and a data warehouse that minimizes the expense of establishing a remote connection.

Regarding **claim 8**, as recited in claim 1, Spitznagel fails to disclose that the mobile terminal (106) and the supplying terminal (104) communicate by the Wireless Application Protocol (WAP).

Howell teaches an infrared structure that is needed to connect an individual vending machine to the cellular network, and the connection of a cellular phone to the vending machine (see col. 5, lines 67- col. 6, lines 6); whereby the “infrared structure” corresponds to the WAP.

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Howell into the system of Spitznagel for the benefit of achieving a system that employs an efficient way of communicating vending-related data between a vending machine and a data warehouse that minimizes the expense of establishing a remote connection.

Regarding **claim 11**, as recited in claim 1, Spitznagel fails to disclose that the wireless network is provided by a cellular network.



Howell teaches a circuit switch cellular network 108 and a wireless data network 206 and other radio-based data communication technologies 208 between the vending machine 202 and the communication concentrator 210 (see col. 4, lines 11-25 and Fig. 2).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Howell into the system of Spitznagel for the benefit of achieving a system that employs an efficient way of communicating vending-related data between a vending machine and a data warehouse that minimizes the expense of establishing a remote connection.

Regarding **claim 14**, as recited in claim 1, Spitznagel fails to disclose that the wireless network obtains the data from a second network which is a wired network.

Howell teaches a public switch network PSTN 106 and switch cellular network 108 and the wireless network 206 (see col. 4, lines 11-25 and Fig. 2); which illustrates the exchange of communication signal between a wireless network and wired network.

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Howell into the system of Spitznagel for the benefit of achieving a system that employs an efficient way of communicating vending-related data between a vending machine and a data warehouse that minimizes the expense of establishing a remote connection.

Art Unit: 2686

Regarding **claim 16**, as recited in claim 1, Spitznagel further discloses that the data transmitted to the mobile terminal (106) from the supplying terminal (104) is only part of the data (a list of application programs, see Page 3, lines 20-39) transmitted to the supplying terminal by (104) the or each data server.

Regarding **claim 20**, as recited in claim 1, Spitznagel fails to disclose that the price at which the electronic data is sold is determined by a person controlling supply of that electronic data to mobile terminals.

However Howell teaches that a communication subscriber is charged a fee each time a circuit-switch cellular connection is made (see col. 6, lines 8-25).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Howell into the system of Spitznagel for the benefit of achieving a system that employs an efficient way of communicating vending-related data between a vending machine and a data warehouse that minimizes the expense of establishing a remote connection

Regarding **claim 21**, as recited in claim 1, Spitznagel fails to disclose that the mobile terminal is a mobile telephone.

However Howell teaches a cellular phone that is used to perform refill or when a technician pays an emergency services visit (see col. 6, lines 35-43).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Howell into the system of Spitznagel for the benefit of achieving a low cost vending machine system that can communicate with a cellular phone.

Regarding **claim 22**, as recited in claim 1, Spitznagel fails to disclose that the mobile terminal (14) is selected from a group consisting of game playing devices, portable audio players, portable video players personal digital assistants and smart telephones.

However Howell teaches that a technician can use the cellular phone to communicate with the modem of the vending machine (see col. 6, lines 35-43); i.e., the cellular phone is being used as the smart telephone.

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Howell into the system of Spitznagel for the benefit of achieving a system that employs an efficient way of communicating vending-related data between a vending machine and a cellular telephone that minimizes the expense of establishing a remote connection.

**5. Claims 4,5,7,15 and 18 are rejected under U.S.C. 103(a) as being unpatentable over Spitznagel in view of Howell and further in view of Poggio et al., (EP 0809221 A2), (hereinafter Poggio).**

Regarding **claims 4 and 5**, as recited in claim 1, the combination of Spitznagel and Howell fail to disclose that the system in which transfer of electronic data between the

Art Unit: 2686

supplying terminal and the mobile terminal is carried out securely and transfer of electronic data between the at least one data server and the supplying terminal is carried out securely

Poggio teaches encryption and decryption in the process of obtaining electronic data or product in the virtual vending machine system (see col. 8, lines 2-33 and col. 10, lines 1-53).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Poggio into the system of Spitznagel and Howell for the benefit of achieving security in an encrypted electronic data distribution system.

Regarding **claim 7**, as recited in claim 6, the combination of Spitznagel and Howell fail to disclose that the supplying terminal and mobile terminal exchange information necessary to enable payment to be made for the electronic data supplied to the mobile terminal.

Poggio teaches the process involve for a user to obtain a vendor's product from a vending machine which involves payment (see col. 5, line 50- col. 6, line 34).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Poggio into the system of Spitznagel and Howell for the benefit of achieving a system that charges a use for it services through a secured system.

Regarding **claim 15**, as recited in claim 1, the combination of Spitznagel and Howell fail to disclose that the wireless network obtains the data from the Internet via a gateway.

Art Unit: 2686

Poggio discloses that the distribution system 100 have many client computers 120 which can be connected to at least one server 212 through an internet (see col.4, lines 12-18).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Poggio into the system of Spitznagel and Howell for the benefit of achieving a system provides secured connectivity.

Regarding **claim 18**, as recited in claim 1, the combination of Spitznagel and Howell fail to disclose that the electronic data obtained from at least one data server is determined by a person controlling operation of the supplying terminal.

Poggio discloses that the vending machine provides the vendors (i.e., the person(s) offering the vending service) with a mechanism to market and distribute (which corresponds to controlling operation) and communicate with the client (see col. 2, line 32-36).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Poggio into the system of Spitznagel and Howell for the benefit of achieving a virtual vending machine that can be used to manage the distribution of electronic data.

**6. Claims 9 and 10 are rejected under U.S.C. 103(a) as being unpatentable over Spitznagel in view of Howell and further in view of Furukawa (U.S. 6,108,548), (hereinafter Furukawa).**

Art Unit: 2686

Regarding **claim 9**, as recited in claim 1, the combination of Spitznagel and Howell fail to teach the wireless network and the wireless connection operate using different carrier frequencies.

Furukawa teaches the concept of the usage of different carrier frequencies  $f_1$  and  $f_2$  in cells 200 and 300 respectively for communication (see col. 6, lines 1-17 and Fig. 4).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Furukawa into the system of Spitznagel and Howell for the benefit of achieving a system that uses different carrier frequencies in different cells in order to minimize or avoid interference among communication devices in different network.

Regarding **claim 10**, as recited in claim 9, the combination of Spitznagel and Howell fail to teach the wireless network uses a carrier frequency which is lower than the carrier frequency of the wireless connection.

Furukawa teaches the concept of using different carrier frequencies  $f_1$  and  $f_2$  in cells 200 and 300 respectively (see col. 6, lines 1-17 and Fig. 4); i.e., either one of the carrier frequencies  $f_1$  or  $f_2$  can be lower or higher than the other for the fact that they are different from each other.

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Furukawa into the system of Spitznagel and Howell for the

Art Unit: 2686

benefit of achieving a system that uses different carrier frequencies in different cells in other to minimize inter-cell interference.

**7. Claims 12 and 13 are rejected under U.S.C. 103(a) as being unpatentable over Spitznagel in view of Howell and further in view of Swartz (U.S. 6,937,998), (hereinafter Swartz).**

Regarding **claim 12**, as recited in claim 1, the combination of Spitznagel and Howell fail to teach that the wireless connection is a connection between the mobile station and the supplying terminal in a pico-cell.

Swartz teaches a provision of base stations mounted at vantage point in an avenue or environment such as shopping malls, flea market or department stores, to connect potential customer to various product and services (see col. 4, lines 34-65 and col. 10, lines 59-67); whereby the "base stations" in the "avenue" or "environment" correspond to the pico-cell.

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Swartz into the system of Spitznagel and Howell for the benefit of achieving a system where product and services can be obtained with the help of base stations which are mounted at vintage areas.

Art Unit: 2686

Regarding claim 13, as recited in claim 1, the combination of Spitznagel and Howell fail to teach that the wireless connection is a Low Power Radio Frequency (LPRF) connection.

Swartz teaches about low power, radio frequency wireless transmission standard protocol between each terminal and base station mounted at vintage point in an avenue or environment such as shopping malls, flea market or department stores, using Bluetooth wireless technology (see col. 4, lines 34-65 and col. 10, lines 59-67);

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Swartz into the system of Spitznagel and Howell for the benefit of achieving a system where product and services can be obtained with the help of base stations that are mounted at vintage areas.

**8. Claim 23 is rejected under U.S.C. 103(a) as being unpatentable over Spitznagel in view of Howell and further in view of Kobata (U.S. 6,393,471), (hereinafter Kobata).**

Regarding **claim 23**, as recited in claim 1, the combination of Spitznagel and Howell fail to teach that data in electronic form is uploaded to the supplying terminal in an operation that is independent from a request being made for the data in electronic form by the mobile terminal.



Kobata teaches an automatic delivery of content to a client; which is independent of a request by the client and only based on the capability of the client's device (see col. 5, lines 9-41).

It would therefore have been obvious to one of the ordinary skill in the art to combine the teaching of Kobata into the system of Spitznagel and Howell for the benefit of achieving a system that can facilitate delivery of content automatically

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Titmuss et al. (U.S. 20020025798 A1)** teaches a telecommunications service delivery.

**Aoki (U.S. 5,983,090)** teaches a mobile communication system with access function to computer network.

**Bjorndahl (U.S. 6,901,241)** teaches system, method and apparatus for secure transmission of confidential information.

**Alexander et al., (U.S. 5,633,839)** teaches music vending machine capable of recording a customer's music selection onto a compact disc.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwasi Karikari whose telephone number is 571-272-8566. The examiner can normally be reached on M-F (8 am - 4pm).

Art Unit: 2686

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on 571- 272 5905. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kwasi Karikari  
Patent Examiner.

  
CHARLES APPIAH  
PRIMARY EXAMINER